REMARKS

In the Office Action mailed January 12, 2007, the Examiner noted that claims 1-13, 15-24, and 26-28 were pending, and rejected claims 1-13, 15-24, and 26-28. Claims 1, 13, 15, 19, 20-24, 27 and 28 have been amended, and new claims 29 and 30 have been added, and, thus, in view of the forgoing claims 1-13, 15-24, and 26-30 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections are traversed below.

Page 2 of the Office Action rejects all claims under 35 U.S.C. § 103 over Kodialam, in view of newly cited Joshi. In particular, the Examiner admitted that Kodialam was deficient noting:

> Kodialam, however does not disclose the cost as being based on delay and number of hops, stream rate, reference rate, predetermined value as an additional cost, and coefficients used to convert delay to number of hops.

The Examiner looked to Joshi to fill in missing features noting:

> Joshi, however does disclose the cost as being based on delay, number of hops, and stream rate (i.e., bandwidth and/or transmission rate) (See col. 2, lines 29-40 and col. 4, lines 32-51), therefore, it would have been obvious to use such things as reference rate, predetermined value as an additional cost, and coefficients used to convert delay to number of hops, to determine cost.

The text of Joshi referred to by the Examiner particularly states:

> In specific embodiments of the invention, transmission requirements for individual routes may include such factors as transmission bandwidth, transmission delay, bit error rate, and the presence or absence of an encryption and decryption capability. In various embodiments of the invention, least cost calculations are based upon the cost of using specific transmission links. Link cost is calculated, taking into account the link bandwidth already allocated for transmission and the total bandwidth capacity of the link. The cost of a route is determined by adding the costs of all links that are contained within such a route.
> (See Joshi, col. 2, lines 29-40)
>
> The cost of a particular link may be defined in a number of ways. First of all, cost may be determined simply in terms of hop count. Each hop, which is a single internodal link, may be assigned a cost equal to unity. In terms of hop count, the connection cost between nodes in network 10 is equal to the total number of hops. A second approach involves user defined cost. Thus, a user may define a connection cost on the basis of propagation delay, with a specific cost figure assigned to each internodal link. Such a cost may, by way of example, be based upon the physical length of an internodal link. Finally, cost may be defined in terms of transit delay. Transit delay is the delay experienced by a user data packet at each node in network 10 and is the sum of any processing delay at each node and any queuing delay incurred while the packet is waiting for an outbound internodal link to be established. Processing delay is constant and queuing delay is based on the total bandwidth of the link and the actual number of packets being transferred on the link at a particular time.
> (See Joshi, col. 4, lines 32-51)

This text does not teach "cost is based on delay and number of hops, **stream rate, reference rate, predetermined value** as an additional cost and coefficients used to convert delay to number of hops" of claim 1 and does not teach "cost = number of hops + α*max (0, (delay-β))*stream rate/reference rate + predetermined value) and where α and β are coefficients to convert delay to number of hops, stream rate is a speed of a distribution stream, and reference rate is expected stream rate" of claim 28.

While transmission bandwidth may be similar to reference rate, reference rate could be a rate less than the maximum rate that is possible at a particular bandwidth. For example, the bandwidth may be 100Kbs and the reference rate 50Kbs. A bandwidth is thus not a reference rate. And transmission rate while it also may be similar to reference rate is also different. In the same example where the bandwidth is 100Kbs and the reference rate is 50Kbs the transmission rate could be still different, sucha s 25 Kbs. As a result, reference rate need not be a transmission rate.

Predetermined value may also be similar to "user defined" "specific cost" of Joshi; however, the user defied specific cost described by Joshi is variable ("physical length") and thus is not predetermined.

The stream rate feature emphasized in bold or the formula set forth above is discussed at all in Joshi.

Claims 13, 15, 19-24, 27 and 28 also have similar features.

For the above-discussed reasons it is submitted that the noted claims distinguish over Kodialam in view of Joshi

Additionally, the embodiments include the lowest cost route going through a redistribution server. That is, the lowest cost route between a source and a destination is forced to be changed by being routed through a redistribution server ("forced to pass through at least one of the redistribution servers" - claim 1). This changes the lowest cost routing determination to one that is more complicated. Kodialam (or Joshi), do not include forcing of a path through a particular node, such as a redistribution server. For the above-discussed reasons it is submitted that the noted claim 1 distinguishes over Kodialam in view of Joshi. Claims 13, 15, 19-24, 27 and 28 also have a similar feature.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 2 emphasizes that a receiver node is selected to minimize cost. Claim 29 emphasizes that the predetermined

value is used to restrict flow in a route. The prior art does not teach or suggest such. It is submitted that the dependent claims are independently patentable over the prior art.

New claim 30 emphasizes cost associated with a route passing through a redistribution server. Nothing in the prior art teaches or suggests such. It is submitted that this new claim, which is different and not narrower than prior filed claims, distinguishes over the prior art.

It is submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: May 11, 2007   By: /J. Randall Beckers/
                                       J. Randall Beckers
                                       Registration No. 30,358

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501